



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,684	12/18/2000	Xm Wong	4593-182	6553
23117	7590	11/23/2009		
NIXON & VANDERHYE, PC				
901 NORTH GLEBE ROAD, 11TH FLOOR				
ARLINGTON, VA 22203				
EXAMINER				
MILLER, BRIAN E				
ART UNIT		PAPER NUMBER		
2627				
MAIL DATE		DELIVERY MODE		
11/23/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/741,684  
Filing Date: December 18, 2000  
Appellant(s): WONG ET AL.

\_\_\_\_\_  
Sumit Bhattacharya  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 8/24/09 appealing from the Office action mailed 3/23/09.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

This instant application has two related Appeal decisions rendered, one on 2/23/06 and the second on 6/13/08.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows:

It is clarified by the Examiner that the 35 U.S.C § 103 rejection of claim 24 is over Albrecht *alone* and NOT in view of, or alternatively, over Ainslie.

#### **WITHDRAWN REJECTIONS**

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner in order to simplify the issues on Appeal: (a) The 35 U.S.C § 112, first paragraph rejections of claims 19-24; (b) The 35 U.S.C § 112, second paragraph rejections of claims 19-24.

#### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### **(8) Evidence Relied Upon**

5,821,494	Albrecht	10-1998
-----------	----------	---------

#### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Albrecht et al (US 5,821,494). (as per claim 19) Albrecht et al discloses a suspension as shown in at least FIG. 3, and FIGs. 12A-12C) which includes: a suspension 44 with a metal suspension bonding pad 64 for bonding to a magnetic head terminal with a slider bonding pad 62, which includes a bonding substance 122/60 which is a conductive adhesive solder film polymer (see col. 11, lines 16-25 and re claims 20-23), applied as a surface finishing material, which material is heat treated "prior

to bonding to a surface" (see col. 10, lines 50-53 & FIG. 10B). Additionally, as shown in FIG. 12A the slider bonding pad 62 is "initially without bonding substance" and subsequently is electrically bonded to a suspension bonding pad 64 when the bonding substance 60 is reflowed (see FIG. 12C and col. 10, lines 35-53).

Further, with respect to the language "wherein the slider bonding pad...with heat treatment," it is understood and well known in the art, that heat treatment will allow a solder connection to melt and permit disconnection of an electrical connection. It is also noted, that this process limitation has not been given any patentable weight (see also Board Decision of 6/13/08 for more details).

Albrecht et al further is considered to show (see FIGs. 21A, 21B, 21C and col. 9, lines 10-53) a plurality of traces 74A extending longitudinally along generally the center of the suspension 44, and along the lateral edges of the slider 42 to the trailing edge of the slider and electrically couple the traces with the magnetic head 40, as known in the art.

2. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Albrecht et al. (US 5,821,494). For a description of Albrecht et al, see the 102 rejection, supra.

Albrecht et al remains expressly silent as to the dimensions, i.e., height and diameter, of the solder bump, however, Albrecht does teach the slider pads to be no larger than 120 um (see col. 11, lines 19-20) which size slider pad would presumably encompass a solder bump having a diameter equal to or approximate to that dimension. Taking this and the knowledge of a skilled artisan into consideration it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided solder bumps within the claimed dimensions to the teachings of Albrecht et al. The motivation would have been: lacking any unobvious or

unexpected results, the particular solder bump height and diameter would have been provided through routine experimentation and optimization so as to optimize the electrical connection with minimal height usage, which would have been realized by a skilled artisan.

Moreover, absent a showing of criticality, the relationship set forth in claim 24 is considered to be within the level of ordinary skill in the art. The law is replete with cases in which the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Appellant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range(s); see *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions; see *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

#### **(10) Response to Argument**

**A...**The arguments with respect to the 35 U.S.C § 112, first and second paragraph rejections are moot as these rejections have been withdrawn by the Examiner in order to simplify the issues on Appeal.

**B...**Appellants submit on page 5 of the Brief, with respect to the 35 U.S.C § 102 rejection of claims 19-23, that “none of the cited Figures teach or suggest a [sic] suspension embodiment

wherein a plurality of traces extend longitudinally generally along the center of a suspension and extend along the lateral edges of a trailing edge of the slider (as described in claim 19).”

The Examiner respectfully disagrees. The Examiner maintains that the reference to Albrecht is considered to show this aforementioned feature. As discussed above, Albrecht et al is considered to show (see FIGs. 21A, 21B, 21C and col. 9, lines 10-53) a plurality of traces 74A extending longitudinally along generally the center of the suspension 44, and along the lateral edges of the slider 42 to the trailing edge of the slider, as required by the claims.

**C...**Appellants’ discussion with respect to the 35 U.S.C § 103 rejection to claim 24 over Albrecht appears to be misdirected, as Appellant presents arguments with respect to the reference to Ainslie, however, Ainslie is not relied upon by the Examiner to show any of the claim limitations. Thus, the arguments with respect to Ainslie et al. should be considered moot, and disregarded.

**D...**With respect to claims 20-24, Appellant has not identified specific reasoning in which the cited reference to Albrecht fails to show or suggest these limitations. Failure to do so amounts to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references and thus Appellant's arguments fail to comply with 37 CFR 1.111(b). Because no remarks have been made, the rejection is considered proper and is maintained.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

BEM  
November 10, 2009

*/Brian E. Miller/  
Primary Examiner, Art Unit 2627*

Conferees:

/A. L. W./  
Andrea Wellington  
Supervisory Patent Examiner, Art Unit

/J. H. F./  
Joseph Feild  
Supervisory Patent Examiner, Art Unit 2627